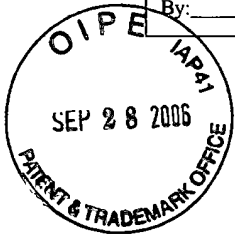


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By: J. G. G. G. G.



PATENT
Attorney Docket No. 018158-011140US
Client Ref. No. VX-1073-C1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

ODRICH, Marc et al.

Application No.: 10/600,027

Filed: June 19, 2003

For: METHOD AND SYSTEMS FOR
LASER TREATMENT OF
PRESBYOPIA USING OFFSET
IMAGING

Confirmation No. 5696

Examiner: David M. Shay

Technology Center/Art Unit: 3735

**APPELLANTS' BRIEF UNDER
37 CFR §41.37**

Mail Stop Appeal Brief
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellant offers this Appeal Brief in furtherance of the Notice of Appeal mailed on May 23, 2006, for the above-referenced application. Appendix A, attached hereto, contains a copy of all claims pending in this case. Appendix B, attached hereto, is marked as the evidence appendix. Appendix C, attached hereto, is marked as the related proceeding appendix.

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TABLE OF CONTENTS

1. REAL PARTY IN INTEREST	3
2. RELATED APPEALS AND INTERFERENCES.....	3
3. STATUS OF CLAIMS	3
4. STATUS OF AMENDMENTS	3
5. SUMMARY OF CLAIMED SUBJECT MATTER	4
6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.....	5
7. ARGUMENT	5
8. CONCLUSION.....	17
9. CLAIMS APPENDIX.....	18
10. EVIDENCE APPENDIX.....	21
11. RELATED PROCEEDINGS APPENDIX	22

1. REAL PARTY IN INTEREST

All right, title, and interest in the subject invention and application are assigned to VISX, Incorporated, having its principal place of business at 3400 Central Expressway, Santa Clara, California 95051. As such, VISX, Incorporated is the real party in interest.

2. RELATED APPEALS AND INTERFERENCES

No other appeals or interferences are known which will directly affect, or be directly affected by, or have bearing on the Board's decision in the pending appeal.

3. STATUS OF CLAIMS

Claims 1-15 are currently pending and are the subject of this appeal. No other claims are pending. Claims 1-9 have been rejected under 35 U.S.C., §112, first paragraph. Claims 10-15 have been rejected under 35 U.S.C. §103(a) over Frey (U.S. Patent No. 6,027,494) in view of Largent (U.S. Patent No. 6,312,424). Claims 10-15 have been rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-15 of U.S. Patent No. 6,280,435. Claims 1-15 have been rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-35 of U.S. Patent No. 6,663,619. All pending claims are being appealed in the subject application.

Claims 11-15 were previously rejected under 35 U.S.C. §112, second paragraph, in the Office Action mailed July 25, 2005. However, these rejections were overcome by Appellant's response mailed October 24, 2005.

4. STATUS OF AMENDMENTS

No amendment to the claims was filed subsequent to the Final Office Action mailed February 23, 2006. A copy of all the pending claims involved in the present appeal is provided in Appendix A attached hereto.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to surgical modifications to the eye. In a specific embodiment, the invention provides ophthalmic surgery techniques which employ a laser to effect ablative photodecomposition of corneal tissue to correct presbyopia and/or other vision defects. U.S. Application No. 10/600,027, filed June 19, 2003 (hereinafter "Application"), page 1, lines 23-26.

Independent claim 1 recites a method of treating a cornea (200) of an eye of a patient to mitigate presbyopia, the eye having a pupil and a cornea (200). The method includes identifying a multifocal ablation shape (211) having a first region (231) providing a near vision correction and a second region (241) providing a far vision correction. An ablation cut profile of the multifocal ablation shape (211) is then adjusted in response to the size of the pupil so as to provide a balance of the near vision correction provided by the first region (231) and the far vision correction provided by the second region (241) for the patient. The method further includes ablating the eye with a series of laser beam pulses according to the adjusted ablation cut profile. These steps are discussed in the Application, for example, at page 5, lines 11-13; page 8, lines 25-30; page 11, lines 16-28; page 13, lines 3-27; page 17, line 20, through page 18, line 10; Figures 1, 2, 3, and 8.

Independent claim 10 recites a system for treating a cornea (200) of an eye (30) of a patient to mitigate presbyopia with a multifocal ablation shape (211), the eye (30) having a pupil and a cornea (200). The system includes a laser (28) for making a beam of an ablative light energy (29), a processor (10, 21) in electrical communication with the laser (28), and a tangible medium (12) coupled to the processor (10, 21) and having stored instructions. The stored instruction, if executed by the processor (10, 21), will cause the processor (10, 21) to perform operations including controlling a distribution of a series of laser beam pulses to ablate the multifocal shape (211) on the eye (30), the multifocal ablation shape (211) producing a first region (231) of the cornea providing a near vision correction and a second region (241) of the cornea providing a far vision correction; and determining the distribution of laser beam pulses to ablate the first (231) and second regions (241) of the multifocal ablation shape (211), where the distribution is determined in response to a signal related to a size of the pupil so as to balance the

near vision correction and the far vision correction of the multifocal treatment for the patient. These elements are discussed in the Application, for example, at page 5, lines 11-13; page 8, lines 25-30; page 11, lines 16-28; page 13, lines 3-27; page 13, line 28, to page 14, line 27; page 17, line 20, through page 18, line 10; Figures 1, 2, 3, 4, and 8.

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-9 are properly rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Whether claims 10-15 are properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Frey (U.S. Patent No. 6,027,494) in combination with Largent (U.S. Patent No. 6,312,424).

Whether claims 10-15 are properly rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-15 of U.S. Patent No. 6,280,435.

Whether claims 1-15 are properly rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-35 of U.S. Patent No. 6,663,619.

7. ARGUMENT

A. Claims 1-9 where improperly rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

In the Final Office Action dated February 23, 2006, claims 1-9 were rejected as unpatentable under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement.

Appellant believes that the subject matter of claims 1-9 was sufficiently described in the originally filed application such that one skilled in the art would have recognized that Appellant was in possession of the claimed invention at the time of filing, because claims 1-9 as originally filed are considered part of the specification and adequately supported, and because the subject matter of original claims 1-9 is additionally well supported throughout the specification and figures of the application as filed. Additionally, the Examiner has failed to provide any real evidence or rationale to overcome the strong presumption of adequate written description. As such, this rejection is traversed, as set forth in further detail discussed below.

To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *Moba, B.V. v. Diamond Automation, Inc.*, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar* 19, USPQ2d 1111, 1116 (Fed. Cir. 1991); MPEP § 2163. An applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. American Airlines, Inc.*, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997); MPEP § 2163 (I).

The subject matter of claims 1-9 is well supported throughout the originally filed specification. First, claims 1-9, which are the subject of the current appeal, constitute claims as originally present in the specification of the application as filed. It is well established that original claims constitute their own written description. *In re Koller*, 204 USPQ 702 (CCPA 1980); MPEP § 2163 (I). In the present case, since the originally filed claims are considered part of the specification, the subject application did include an adequate written description of originally filed claims 1-9.

Moreover, claims 1-9 are supported throughout the specification, detailed description and originally filed figures, and not just at the one paragraph of the specification cited by the Examiner. For example, adjusting an ablation cut profile of the multifocal ablation shape in response to the size of the pupil is well described, e.g., at paragraphs 0025-0027, 0059-0060, 0070-0071, and Figures 1, 2, 3, and 8 of the originally filed application. In addition to describing the subject matter of claims 1-9 in detail, the specification discloses that the methods described therein have actually been implemented with effective results. See, e.g., page 17, lines 13-15; page 18, lines 13-14. As such, one skilled in the art would recognize that the Appellant was in possession of the originally claimed invention at the time of filing.

As is well known by the Examiner, there is a strong presumption that an adequate written description of the originally claimed invention is present when the application is filed. A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., *In re*

Marzocchi 169 USPQ 367, 370 (CCPA 1971). The Examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. The Examiner has the initial burden of presenting by a preponderance of the evidence why a person skilled in the art would not recognize in an Applicant's disclosure a description of the invention defined by the claims. In re Wertheim, 191 USPQ 90, 97 (CCPA 1976).

Here, the Examiner has failed to present any reasonable basis for overcoming the strong presumption of adequate written description of originally filed claims, which are well supported throughout the specification (see above). In fact, rather than focusing on the language of the originally filed, pending claims, the Examiner has selected a sentence from the specification as the focus of the examination. In the Final Office Action mailed February 23, 2006, page 2, the Examiner argues, *inter alia*, the following:

The fact that the material of the claims may or may not be contained per se in the originally filed specification is not the issue.

The pertinent part of paragraph [0022] referred to in the previous office action being "The inventrion [sic] provides for adjusting the ablation to compensate for factors effecting the final geometry of the healed cornea." (emphasis added). Applicant has not adequately taught how to adjust the geometry of the cornea after it is healed at a time before it is incised.

Appellant respectfully disagrees. As set forth above, subject matter set forth in the original claims is presumed to satisfy the written description requirement and additionally well described throughout the specification. The provision of the specification cited by the Examiner is simply not relevant to the language of the originally filed claims and the written description analysis under the first paragraph of 35 U.S.C. § 112 and, therefore, is insufficient to overcome the strong presumption of an adequate written description. As such, the Examiner has failed to meet the heavy burden of the PTO and demonstrate by a preponderance of the evidence that a person skilled in the art would not recognize Appellant to be in possession of the claimed invention at the time of filing.

Therefore, for the reasons set forth above, one skilled in the art would recognize that Appellant was in possession of the invention as originally claimed, and the Examiner has

failed to present a reasonable basis for overcoming the strong presumption of adequate written description. Accordingly, the rejections of claims 1-9 under the first paragraph of 35 U.S.C. § 112 are improper and should be withdrawn.

B. Claims 10-15 were improperly rejected under 35 U.S.C. § 103(a) as being unpatentable over Frey (U.S. Patent No. 6,027,494) in combination with Largent (U.S. Patent No. 6,312,424).

In the Final Office Action dated February 23, 2006, claims 10-15 were rejected as being unpatentable under 35 U.S.C. § 103(a) over Frey in view of Largent. Appellant believes that the Examiner has not established a *prima facie* case of obviousness under 35 U.S.C. § 103 and MPEP §§ 2142 and 2143, and as such respectfully traverses these rejections for the following reasons discussed below.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. *In re Fine*, 5 USPQ2d 1596, 1598, 1599 (Fed. Cir. 1988); MPEP § 2142. *See also In re Piasecki*, 223 USPQ 785, 787, 788 (Fed. Cir. 1984). To establish a *prima facie* case of obviousness, three basic criteria must be met. MPEP at §§ 2142 and 2143. First, the Examiner must show some suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or combine reference teachings so as to achieve the claimed invention. *Id.* at §§ 2142 and 2143.01; *In re Fine*, 5 USPQ2d at 1598, 1599. Second, the Examiner must establish a reasonable expectation of success for the modifications. MPEP §§ 2142 and 2143.02. Finally, the Examiner must show that the cited references, alone or in combination, teach or suggest all claim limitations. *Id.* at §§ 2142 and 2143.03; *In re Royka*, 180 USPQ 580, 583 (CCPA 1974). The teaching or suggestion to make the claimed combination, as well as the reasonable expectation of success, must be found in the prior art and cannot be based on applicant's disclosure. MPEP § 2142; *In re Vaeck*, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). *See also* MPEP § 2143-2143.03 (citing cases pertinent to each of the three criteria).

In the present case, and for reasons set forth in detail below, a *prima facie* case of obviousness has not been met because the Examiner's rejection fails at least to satisfy at least two of the above requirements. In particular, there is no suggestion or motivation to combine the cited references, and even if combined, the cited references, alone or in combination, fail teach or suggest all claim limitations. Appellant submits that each rejected claim 10-15 presents distinct issues concerning patentability. In the interest of administrative economy and efficiency, however, Appellant presents their position for the pending claims as a single group, using claim 10, from which other rejected claims directly or indirectly depend, as a representative claim.

Independent claim 10, from which claims 11-15 depend, reads as follows:

A system for treating a cornea of an eye of a patient to mitigate presbyopia with a multifocal ablation shape, the eye having a pupil and a cornea, the system comprising:

a laser for making a beam of an ablative light energy;

a processor in electrical communication with the laser; and

a tangible medium coupled to the processor and having stored instructions that, if executed by the processor, will cause the processor to perform operations comprising:

controlling a distribution of a series of laser beam pulses to ablate the multifocal shape on the eye, the multifocal ablation shape producing a first region of the cornea providing a near vision correction and a second region of the cornea providing a far vision correction; and

determining the distribution of laser beam pulses to ablate the first and second regions of the multifocal ablation shape, where the distribution is determined in response to a signal related to a size of the pupil so as to balance the near vision correction and the far vision correction of the multifocal treatment for the patient.

[Emphasis provided].

Appellant first points out that the Examiner has not shown where the cited references describe or suggest all the elements of claim 10 as recited above, thereby precluding *prima facie* obviousness. In particular, the Examiner has not shown where the cited references teach or suggest "determining the distribution of laser beam pulses to ablate the first and second regions of the multifocal ablation shape, where the distribution is determined in response to a signal related to size of the pupil...", as recited in claim 10.

Frey teaches a system and method where the cornea is reshaped in an area approximately equal to the dark adapted pupil size of the eye in order to reduce halo effect and/or improve night vision. However, the teachings of Frey are limited to adjusting just one aspect of the ablation region in response to pupil size - i.e., the outer periphery or the overall extent of the region of the cornea subject to ablation. Frey fails to teach determining the distribution of laser beam pulses to ablate multiple regions of the multifocal ablation shape, particularly wherein the distribution is determined in response to a signal related to a size of the patient's pupil, as required by the current claims. Frey does not teach balancing, based on pupil size, both near vision correction and far vision correction of a multifocal treatment. Thus, Frey does not teach determining multiple ablation regions of a multifocal ablation shape in response to a signal related to a size of the patient's pupil and, therefore, does not provide the advantages of treating a cornea of an eye of a patient to mitigate presbyopia with a multifocal ablation shape according to the system defined by current claim 10.

Largent does not cure the deficiencies of Frey. Largent teaches a method of vision correction via shaping multiple regions of a cornea to provide vision correction at multiple corresponding distances. However, Largent teaches a "one size fits all" outer ablation shape and does not teach adjusting any aspect of an ablation shape based on pupil size. In particular, Largent fails to teach determining the distribution of laser beam pulses to ablate the first and second regions of the multifocal ablation shape in response to a signal related to pupil size and, therefore, fails to provide the teachings that are missing from Frey (see above). While Largent's disregard of pupil size variations among different patients in determining the size for each of its multiple regions may have been consistent with the thinking in the field at the time, the teachings of Largent are directly contrary to the invention as defined by claim 10.

Furthermore, even if, for arguments sake only, one were to attempt to combine the references by employing the pupil scaling taught by Frey with the multi-region corneal laser ablation taught by Largent (even though there appears to be no motivation to do so - see below), the combination would appear to be limited to adjusting only the overall size of the ablation region such that the outer periphery of the ablation region covers the maximum pupil size, as Frey's approach changes only the overall size of the treatment *without any* change in shape. Thus, only one aspect of the ablation region (i.e., overall diameter of the ablated region) would be adjusted based on pupil size in the hypothetical combination of cited references. The combination would still not teach determining the distribution of laser beam pulses to ablate the first and second regions of the multifocal ablation shape, wherein the distribution is determined in response to a signal related to a size of the patient's pupil, as recited by claim 10. The combination would not teach balancing the near vision correction and the far vision correction of the multifocal treatment in response to pupil size.

In response to Appellant's remarks regarding the failure of the cited references to teach or suggest each and every element of the claimed invention, the Examiner argued, *inter alia*, as follows:

The examiner notes that *prima facie* obviousness is evaluated on the basis of what the combined references would teach one having ordinary skill in the art at the time of the invention. The examiner notes that one having ordinary skill in the art would be an ophthalmologist who is at least familiar with the basics of providing multifocal correction to patients afflicted with presbyopia. Those familiar with these basics will understand that *both* corrections are provided for a reason and that both corrections must be usefully available to the patient in order to produce a useful correction e.g. in the method of Largent.

Final Office Action mailed 2/23/2006, pages 2-3; original emphasis.

These statements by the Examiner are insufficient to rebut Appellant's remarks pointing out that the cited references fail to teach each and every element of the claimed invention. First, regardless of the skill level of an artisan reviewing the cited references, the fact

remains that the references simply do not teach determining the distribution of laser beam pulses to ablate the first and second regions of the multifocal ablation shape, wherein the distribution is determined in response to a signal related to a size of the patient's pupil, as recited by claim 10. (see above). Second, regarding the Examiner's comments on Largent, Appellant points out that the multiple corrections of Largent were, in fact, "provided for a reason" and were "usefully available to the patient". Nevertheless, Largent still failed to teach adjusting any aspect of ablation shape based on pupil size, and certainly did not teach adjusting multiple regions of the multifocal ablation shape in response to pupil size. Frey certainly does not teach balancing both near vision correction and far vision correction of a multifocal treatment based on pupil size. Frey fails to provide the teachings that are missing from Largent.

Appellant further points out that relying on unsupported statements regarding knowledge in the art is insufficient to establish a *prima facie* case of obviousness. It is well supported in Federal Circuit case law that it is never appropriate to rely solely on alleged "common knowledge" in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. *In re Zurko* 59 USPQ2d 1693, 1697 (Fed. Cir. 2001); MPEP § 2144.03(A). The Examiner "cannot simply reach conclusions based on [his] own understanding or experience - or on [his] assessment of what would be basic or common sense. Rather the [Examiner] must point to some concrete evidence in the record in support of these findings." *Id.* An assessment of basic knowledge and/or common sense that is not based on any evidence in the record lacks substantial evidentiary support. *Id.*; see also *In re Lee*, 61 USPQ2d 1430, 1434-1435 (Fed. Cir. 2002). In the present case, the Examiner failed to cite any evidentiary support for the arguments regarding knowledge in the art.

Nevertheless, in the Final Office Action mailed 2/23/2006, page 3, the Examiner continues to argue the following:

The same knowledge that would allow the ophthalmologist to determine the relative ratios of the two corrections to begin with, would allow the same ophthalmologist to produce an appropriate ratio of the relative areas of the two corrections in view of an alteration in size of the optical zone based on pupil size, as taught by Frey et al. Just as if the ophthalmologist were adjusting a

prescription for bifocals form [sic] one size lens to a second, different sized lens in a pair of conventional spectacles.

However, the Examiner's reasoning does not support a case of *prima facie* obviousness. For example, vision correction via bifocal eyeglasses and vision correction via cornea ablation are fundamentally distinct, e.g., as bifocal eyeglasses require the wearer to alter the viewing angle in order to separately view an object either through a near vision corrective lens or through a far vision correction lens. No such viewing angle adjustment is required or even possible where a multifocal shape is ablated on the cornea of the eye. As such, the Examiner's analogy is misplaced. Moreover, Appellant points out that conventional vision correction via bifocal eyeglasses cited by the Examiner disregards pupil size. Thus, the Examiner's arguments would actually support Appellant's contention that the system of claim 10 would not have been *prima facie* obvious in view of either the cited reference or knowledge in the art since, for example, such conventional techniques for presbyopia vision correction typically disregard pupil size.

Accordingly, in the present case, the Examiner has failed to identify, either in the cited references or with any objective evidence or real reasoning based on knowledge in the art, each and every element of the system of claim 10.

Furthermore, not only do the cited references fail to teach the claimed invention, but without the benefit of hindsight there would be no motivation to combine Frey and Largent in the first place. It is well-settled that a *prima facie* case under 35 U.S.C. § 103 requires a clear and particular showing of some suggestion or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify a reference or combine reference teachings so as to achieve the specific combination as claimed by the applicant. See MPEP §§ 2142, 2143.01; *In re Fine*, 5 USPQ2d at 1598, 1599 (Fed. Cir. 1988); *In re Dance*, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998). The suggestion or motivation to make the claimed combination must be found in the prior art and cannot be based on applicant's disclosure. MPEP § 2142; *In re Vaack*, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). See also

MPEP §§ 2143, 2143.01 (citing cases). Moreover, the proposed motivation must have sufficient "force" to "impel persons skilled in the art to do what applicant has done." *Ex parte Levengood*, 28 USPQ2d 1300, 1302 (Bd. Pat. App. Inter. 1993). The motivation must also be both objective and specific, *i.e.*, the Examiner's showing must be clear and particular. *See In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). The case law of the Federal Circuit "makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for showing of the teaching or motivation to combine prior art references." *Id.* at 1616, 1617.

In the present case, the Examiner alleges that one would have been motivated to combine Frey with Largent because "it would have been obvious to the artisan of ordinary skill to employ the device of Frey on a subject with presbyopia, since this condition is correctable with laser sculpture as taught by Largent." Office Action mailed July 25, 2005, page 3; Final Office Action mailed February 23, 2006, page 4. However, if a presbyopia condition is correctable with the system of Largent as stated by the Examiner, one of ordinary skill would have no reason or motivation to then select a different system for presbyopia correction, and certainly would not be motivated to select the device of Frey, since Frey fails to teach correction of presbyopia or ablating multiple focal regions of the eye.

The Examiner further alleges that the requisite motivation exists to combine the cited references "since this would reduce the halo effect and improve night vision, as taught by Frey". *Id.* However, the Examiner has not pointed to any evidence, in the cited references or otherwise, showing a suggestion or motivation to modify the teachings of the cited references to achieve either the proposed combination or the invention as claimed. In fact, Largent's focus on a "one size fits all" ablation shape that specifically disregards pupil size, and which would not easily be adaptable for scaling of the outer periphery of the ablation shape, as taught by Frey, specifically weighs against the combination proposed by the Examiner. The Examiner's arguments regarding motivation to combine do not constitute the requisite clear and particular showing of a motivation to combine under 35 U.S.C. § 103. Accordingly, there would be no suggestion or motivation so as to impel the skilled artisan to combine the teachings and modify

Largent to employ pupil scaling of the outer periphery of the ablation shape (which would still fail to teach the invention of claim 10 - see above).

Thus, for the reasons set forth above, the Office has failed to establish a *prima facie* case of obviousness with respect to the claimed invention, because there is no motivation or suggestion to combine the cited references and, even if combined, Frey and Largent would still fail to teach or suggest each and every element of the present invention as recited in any of claims 10-15. Accordingly, Appellant respectfully requests that the rejection of claims 10-15 under 35 U.S.C. § 103 be withdrawn and the claims be allowed.

C. Rejections of claims 10-15 under the judicially created doctrine of obviousness-type double patenting over claims 1-15 of U.S. Patent No. 6,280,435.

In the Final Office Action dated February 23, 2006, claims 10-15 were rejected as being unpatentable under the judicially created doctrine of obviousness-type double patenting over claims 1-15 of U.S. Patent No. 6,280,435.

Appellant has previously acknowledged this rejection of the claims and submitted that, upon final resolution of allowable claims, a terminal disclaimer in compliance with 37 C.F.R. § 1.321(c) would be timely filed if necessary (Appellant's response mailed October 24, 2005). Appellant addresses these rejections here in order to be fully responsive to all grounds of rejection.

D. Rejections of claims 1-15 under the judicially created doctrine of obviousness-type double patenting over claims 1-35 of U.S. Patent No. 6,663,619.

In the Final Office Action dated February 23, 2006, claims 1-15 were rejected as being unpatentable under the judicially created doctrine of obviousness-type double patenting over claims 1-15 of U.S. Patent No. 6,663,619.

Appellant has previously acknowledged this rejection of the claims and submitted that, upon final resolution of allowable claims, a terminal disclaimer in compliance with 37 C.F.R. § 1.321(c) would be timely filed if necessary (Appellant's response mailed October 24,

ODRICH, Marc et al.
Appl. No. 10/600,027

PATENT
Attorney Docket No. 018158-011140US

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ODRICH, Marc et al.
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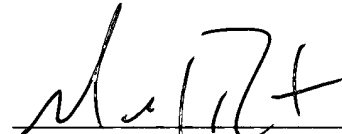
8. CONCLUSION

Appellant believes that the above discussion is fully responsive to all grounds of rejection set forth in the Final Office Action dated February 23, 2006. For the above stated reasons, it is respectfully submitted that the rejections should be reversed.

Respectfully submitted,

Date: _____

9/25/2006



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9. CLAIMS APPENDIX

1. A method of treating a cornea of an eye of a patient to mitigate presbyopia, the eye having a pupil and a cornea, the method comprising:

identifying a multifocal ablation shape having a first region providing a near vision correction and a second region providing a far vision correction;

adjusting an ablation cut profile of the multifocal ablation shape in response to the size of the pupil so as to provide a balance of the near vision correction provided by the first region and the far vision correction provided by the second region for the patient;

ablating the eye with a series of laser beam pulses according to the adjusted ablation cut profile.

2. The method of claim 1, wherein the ablation cut profile further comprises a third region providing an intermediate optical surface having an optical power continuously varying between the first region providing near vision correction and the second region providing far vision correction, so as to provide intermediate vision correction with the intermediate optical surface.

3. The method of claim 2, wherein the intermediate optical surface varies from a first optical power near the first region to a second optical power near the second region.

4. The method of claim 3, wherein the difference in optical power between the first optical power near the first region and the second optical power near the second region has a range from about 1 to 4 D.

5. The method of claim 1, wherein the first region is disposed centrally in relation to the pupil of the eye.

6. The method of claim 1, further comprising scaling the ablation cut profile in relation to the size of the pupil.

7. The method of claim 6, wherein the step of scaling of the ablation cut profile is done so as to scale the optical power of the ablation cut profile in relation to the size of the pupil.

8. The method of claim 7, wherein the optical power of the first region remains constant during the step of scaling.

9. The method of claim 7, wherein the optical power of the second region remains constant during the step of scaling.

10. A system for treating a cornea of an eye of a patient to mitigate presbyopia with a multifocal ablation shape, the eye having a pupil and a cornea, the system comprising:

a laser for making a beam of an ablative light energy;

a processor in electrical communication with the laser; and

a tangible medium coupled to the processor and having stored instructions that, if executed by the processor, will cause the processor to perform operations comprising:

controlling a distribution of a series of laser beam pulses to ablate the multifocal shape on the eye, the multifocal ablation shape producing a first region of the cornea providing a near vision correction and a second region of the cornea providing a far vision correction; and

determining the distribution of laser beam pulses to ablate the first and second regions of the multifocal ablation shape, where the distribution is determined in response to a signal related to a size of the pupil so as to balance the near vision correction and the far vision correction of the multifocal treatment for the patient.

11. The system of claim 10, wherein the first region providing near vision correction is disposed centrally in relation to the pupil of the eye.

12. The system of claim 10, wherein the near vision correction and the far vision correction are balanced with a variable of a refractive correction in response to the size of the pupil.

13. The system of claim 11, wherein the variable of the refractive correction includes a dimension across the refractive correction .

14. The system of claim 10, wherein the near vision correction and the far vision correction are balanced in response to the size of the pupil so as to scale a dimension across the first region providing near vision correction in relation to the size of the pupil.

15. The system of claim 10, wherein the near vision correction and the far vision correction are balanced in response to the size of the pupil so as to scale a dimension across the second region providing far vision correction in relation to the size of the pupil.

ODRICH, Marc et al.
Appl. No. 10/600,027

PATENT
Attorney Docket No. 018158-011140US

10. EVIDENCE APPENDIX

None.

ODRICH, Marc et al.
Appl. No. 10/600,027

PATENT
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11. RELATED PROCEEDINGS APPENDIX

None.



Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL
For FY 2006☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) 500**Complete if Known**

Application Number	10/600,027
Filing Date	June 19, 2003
First Named Inventor	ODRICH, MARC
Examiner Name	David M. Shay
Art Unit	3735
Attorney Docket No.	018158-011140US

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____☒ Deposit Account Deposit Account Number: 20-1430 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES**Fee Description**

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

Small Entity	
Fee (\$)	Fee (\$)
50	25
200	100
360	180

Total Claims**Extra Claims****Fee (\$)****Fee Paid (\$)**

-20 or HP = _____ x _____ = _____

HP = highest number of total claims paid for, if greater than 20

Indep. Claims**Extra Claims****Fee (\$)****Fee Paid (\$)**

-3 or HP = _____ x _____ = _____

HP = highest number of independent claims paid for, if greater than 3

Multiple Dependent Claims**Fee (\$)****Fee Paid (\$)****3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets**Extra Sheets****Number of each additional 50 or fraction thereof****Fee (\$)****Fee Paid (\$)**

- 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Filing a brief in support of an appeal

Fees Paid (\$)

500

SUBMITTED BY

Signature

Registration No.
(Attorney/Agent) 52,182

Telephone 206-467-9600

Name (Print/Type)

Michael T. Rosato

Date

9/25/2006